## Claim Listing

(Currently Amended) A compound of the formula: l.

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wherein:

R<sup>1</sup> and R<sup>2</sup> each independently is hydrogen, alkyl, aryl, acyl, halo, nitro, amino, cyano, alkoxy, hydroxy, aryloxy, alkylthio, arylthio, thiol, carbonylamino, aminocarbonyl, or haloalkyl;

R3 and R4 each independently is hydrogen, halo, alkyl, aeyl, aryl, or arylalkyl; R5 is:

n is 0 to 4;

R<sup>6</sup> in each independent occurrence is hydrogen, alkyl, alkoxy, or halo;

R<sup>7</sup> and R<sup>8</sup> each independently is hydrogen or alkyl; and

R<sup>9</sup> is hydrogen, alkyl, or arylalkyl;

or an individual isomer, a racemic or non racemic mixture of isomers, a prodrug, or a pharmaceutically acceptable salt or solvate thereof.

- (Original) The compound of claim 1, wherein R<sup>3</sup> and R<sup>4</sup> each 2. independently is hydrogen, halo or alkyl.
- (Original) The compound of claim 1, wherein R1 and R2 each 3. independently is hydrogen, halo, or alkoxy.

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(Original) The compound of claim 1, wherein n is 1 and wherein R<sup>6</sup> is hydrogen or halo.

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- (Original) The compound of claim 1, wherein  $R^7$  and  $R^8$  are hydrogen. 5.
- (Original) The compound of claim 1, wherein R9 is hydrogen or alkyl. 6.
- (Original) The compound of claim 1, wherein: 7. R<sup>1</sup> and R<sup>2</sup> each independently is hydrogen, halo, or alkoxy; R<sup>3</sup> and R<sup>4</sup> each independently is hydrogen, halo or alkyl; n is 1 and R<sup>6</sup> is hydrogen or halo; R<sup>7</sup> and R<sup>8</sup> are hydrogen; and

R<sup>9</sup> is hydrogen or alkyl.

(Original) The compound of claim 7, wherein said compound has the 8. formula:

$$R^{2}$$
 $R^{3}$ 
 $R^{4}$ 
 $R^{8}$ 
 $R^{8}$ 
 $R^{7}$ 
 $R^{8}$ 
 $R^{7}$ 
 $R^{8}$ 
 $R^{7}$ 

9. (Original) The compound of claim 7, wherein said compound has the formula:

$$R^{2}$$
 $R^{3}$ 
 $N-R^{9}$ 
 $R^{1}$ 
 $R^{4}$ 
 $R^{4}$ 
 $R^{6}$ 
 $R^{6}$ 
 $R^{7}$ 

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10. (Original) The compound of claim 7, wherein said compound has the formula:

$$\begin{array}{c|c}
R^2 & & \\
\hline
R^3 & (R^6)_n & & \\
R^7 & & \\
R^4 & & \\
\end{array}$$

- 11. (Original) The compound of claim 8, wherein one of R<sup>1</sup> and R<sup>2</sup> is halo and the other is hydrogen.
- 12. (Original) The compound of claim 10, wherein one of  $R^1$  and  $R^2$  is halo and the other is hydrogen.
  - 13. (Original) The compound of claim 12, wherein n is 1 and R<sup>6</sup> is halo.
  - 14. (Original) The compound of claim 12, wherein n is 0.
  - 15. (Original) The compound of claim 10, wherein R<sup>1</sup> and R<sup>2</sup> are hydrogen.
  - 16. (Original) The compound of claim 15, wherein n is 1 and R<sup>6</sup> is halo.
  - 17. (Original) The compound of claim 15, wherein n is 0.
  - 18. (Original) The compound of claim 12, wherein R<sup>9</sup> is hydrogen.
  - 19. (Original) The compound of claim 12, wherein R<sup>9</sup> is methyl.
  - 20. (Original) The compound of claim 13, wherein R<sup>9</sup> is hydrogen.

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- 21. (Original) The compound of claim 13, wherein R<sup>9</sup> is methyl.
- 22. (Original) The compound of claim 14, wherein R<sup>9</sup> is hydrogen.
- 23. (Original) The compound of claim 14, wherein R<sup>9</sup> is methyl.
- 24. (Original) The compound of claim 15, wherein R<sup>9</sup> is hydrogen.
- 25. (Original) The compound of claim 15, wherein R<sup>9</sup> is methyl.
- 26. (Original) The compound of claim 16, wherein R<sup>9</sup> is hydrogen.
- 27. (Original) The compound of claim 16, wherein R<sup>9</sup> is methyl.
- 28. (Original) The compound of claim 17, wherein R<sup>9</sup> is hydrogen.
- 29. (Original) The compound of claim 17, wherein R<sup>9</sup> is methyl.
- 30. (Original) A pharmaceutical composition comprising, comprising a compound of claim 1 together with a pharmaceutically acceptable carrier.
- 31. (Currently Amended) A method for treating a central nervous system disease state in a subject, said disease state selected from the group consisting of schizophrenia, depression and memory disorders said method comprising administering to said subject a therapeutically effective amount of a compound of claim 1.
  - 32. (Canceled)
  - 33. (Canceled)

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## 34. (Canceled)

(Original) A method for producing a compound of claim 1, comprising 35. contacting a 4-halobenzenesulfonyl-indole of the formula:

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$$\begin{array}{c|c}
\mathbb{R}^2 & \mathbb{R}^3 & \mathbb{R}^4 \\
\mathbb{R}^1 & \mathbb{R}^5 & \mathbb{R}^6
\end{array}$$

with a piperazine of the formula:

$$R^8$$

to produce a compound of the formula:

$$\begin{array}{c}
\mathbb{R}^{2} \\
\mathbb{R}^{3} \\
\mathbb{R}^{4}
\end{array}$$

$$\begin{array}{c}
\mathbb{R}^{8} \\
\mathbb{R}^{7}$$

$$\begin{array}{c}
\mathbb{R}^{8} \\
\mathbb{R}^{7}
\end{array}$$